

REMARKS:

Applicant has carefully studied the nonfinal Examiner's Action and all references cited therein. The amendment appearing above and these explanatory remarks are believed to be fully responsive to the Action. Accordingly, this important patent application is now believed to be in condition for allowance.

Applicant responds to the outstanding Action by centered headings that correspond to the centered headings employed by the Office, to ensure full response on the merits to each finding of the Office.

Claim Rejections – 35 U.S.C. § 112

Claims 6-8, 13 and 14 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Claims 6 and 7 have been amended to overcome the rejection

Claim 8 has been canceled.

The Office rejected claim 13, but did not provide a reason for the rejection under 35 U.S.C. § 112, second paragraph for the rejection. Applicant believes that claim 13 is definite and is in condition for allowance.

Claim 14 has been amended to overcome the rejection by the Office.

Claim Rejections – 35 U.S.C. § 101

Claims 1-14 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Independent claims 1 and 14 have been amended to overcome the 35 U.S.C. § 101 rejection by the Office and are now believed to be in condition for allowance.

Claim Rejections – 35 U.S.C. § 103

Applicant acknowledges the quotation of 35 U.S.C § 103(a).

Claims 1-5, 9, 10, 12, 13 and 14 stand rejected under 35 U.S.C § 103(a) as being unpatentable over Giger et al. (U.S. 5,133,020) in view of Huo et al. (U.S. 6,282,305).

Regarding claim 1, the Office states that Giger et al. teaches identifying a standard threshold of the computer algorithm for identifying false positive abnormalities (column 6, lines 33-column 9, line 10); and adjusting the threshold for identifying false positives based on the risk associated with a patient (column 12, line 58-column 13, line 7). The Office goes on to state that while Giger et al. does not specifically teach calculating breast cancer risk, that Huo et al. discloses a method which includes establishing a risk probability with a patient with factors such as age (column 5, lines 55-63; column 6, lines 25-40); applying a computer algorithm to find abnormalities in a patient's mammogram (column 9, lines 30-48). The Office concludes that it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the references of Huo et al. with Giger et al. to gain the benefit of using known risk analysis methods to improve the prognosis or diagnosis of breast cancer based on mammograms. Giger et al. indicates that the threshold may be adjusted for the risk assessment of a patient for better evaluation of a mammogram (column 12, line 58-column 13, line 7). Based on their recommendation, one of ordinary skill in the art would be motivated to search for a method of calculating breast cancer risk. Huo et al. provides methods of calculating breast cancer risk. One of ordinary skill in the art would be motivated to combine the references of Giger et al. and Huo et al. in order to carry out Giger et al.'s method as he indicates.

Applicant respectfully traverses the finding of the Office.

Claims 1 and 14 have been amended to more clearly describe that which the Applicant regards as the invention. Amended claim 1 includes the steps of: establishing a risk probability value associated with an asymptomatic patient, the risk probability value calculated from an array of risk factors associated with breast cancer; selecting a computer algorithm to identify abnormalities in the asymptomatic patient's mammogram; identifying a standard threshold of the

computer algorithm for identifying false positive abnormalities, wherein the standard threshold is independent of the array of risk factors associated with the asymptomatic patient; adjusting the standard threshold of the computer algorithm for identifying false positive abnormalities in response to the risk probability value associated with the asymptomatic patient; applying the computer algorithm using the adjusted standard threshold to identify abnormalities in the asymptomatic patient's mammogram.; and producing an electronic output image of the asymptomatic patient's mammogram that visualizes the identified abnormalities. As such, the "standard threshold" in accordance with the present invention is a standard threshold for identifying false positive abnormalities that is independent of the array of risk factors associated with the asymptomatic patient.

By contrast, the "threshold" of Giger is not a threshold for identifying false positive abnormalities, but instead is described as a plurality of N threshold values obtained from gray-level histograms for each of a plurality of images. The N threshold values of Giger are used to compare pixels of original and current images. Applicant contends that the "N threshold values" of Giger are not equivalent to the "standard threshold" of the present invention.

For the reasons cited above, Applicant believes that amended independent claims 1 and 14 are not obvious in view of Giger et al. in combination with Huo et al., and are therefore believed to be in condition for allowance.

Claims 2-7 and 9-13 are dependent upon claim 1, and are therefore allowable as a matter of law.

If the Office is not fully persuaded as to the merits of Applicant's position, or if an Examiner's Amendment would place the pending claims in condition for allowance, a telephone call to the undersigned is requested.

Very respectfully,
SMITH & HOPEN



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CERTIFICATE OF ELECTRONIC TRANSMISSION

(37 C.F.R. 2.190 (b))

I HEREBY CERTIFY that this correspondence is being electronically transmitted to the Patent and Trademark Office through EFS Web on March 20, 2008.

Date: March 20, 2008

/lauren reeves/

Lauren Reeves